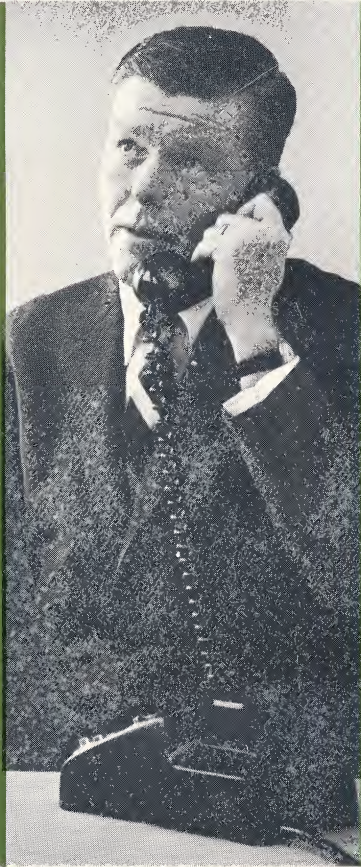




"Why hello, Mr. Thompson!"



"I'll check on that immediately, sir. I'm putting you on 'hold'..."



"Ed, please give me some figures from the Thompson file. I'll wait."



"All right, Mr. Thompson, I have that information for you now. Mr. Thompson? Mr. Thompson?"

Where is Mr. Thompson?

**Centrum-
the world's
most advanced
intercommunication
system**



Above: Centrum user's hands are free for telephoning and taking notes.

Typical Centrum Installations: Addo-X, Inc., New York, N. Y. / Alaska Lumber & Pulp Co., Seattle, Wash. / Atlas Copco, Hackensack, N. J. / Bruno-N. Y. Corp., New York, N. Y. / Centri-Spray, Detroit, Mich. / Columbia Presbyterian Medical Hospital, New York, N. Y. / Corning Glass Works, Corning, N. Y. / Dow Chemical, Freeport, Texas / Facit-Ohdner, Inc., New York, N. Y. / Fagersta Steel, Caldwell, N. J. / Florists Telegraph Delivery Association, Ltd., Detroit / Germaine Monteil Cosmetic Corp., Deer Park, N. Y. / Hoeganaes Sponge Iron Co., Camden, N. J. / IBM Corporation, Seattle, Wash. / Improved Machine Nashua, N. H. / National Biscuit Co., New York, N. Y. / National Aeronautics & Space Administration, Houston, Texas / National Commercial Bank & Trust Co., Albany, N. Y. / Quincy City Hospital, Quincy City, Mass. / Pollock Paper Div. of St. Regis Paper Co., Seattle, Wash. / Sears, Roebuck & Co., Chicago, Ill. / Stenocord, Los Angeles, Cal. / Swedish Pavilion, New York World's Fair / Uddeholm Co. of America, Inc., Totowa, N. J. / United Screen Artists, Studio City, Cal. / University Hospital, Cleveland, Ohio / Veterans Administration Hospital, Martinez, Cal. / Wm. Beaumont Hospital, Royal Oaks, Mich. **Sweden:** Saab / Volvo / Swedish Ball Bearing / SKF / Sandvik Steel / Shell / SAS. **England:** SHAPE Headquarters / British Armed Forces / U.S. Armed Forces in Britain / Cadbury / Wimbleton Stadium / BBC / Mayfair Hotel / Vauxhall Motors. **Germany:** Rheinstahl / Stinnes / Kaufhof / Telefunken / Kloeckner / Mercedes-Benz / Philips of Germany / Volkswagen. **Also Centrum installations in 50 other countries.**



Hands-Free intercommunication for both parties!

With the Centrum, both parties talk at a convenient distance from the stations, without touching them. Automatic electronic voice-switching allows each station to serve both as microphone and speaker. Gone is the familiar inconvenience of a "press-to-talk" switch.

While using the Centrum, you can take notes, light a cigarette, or even walk about the room. Your conversation is transmitted in true voice fidelity, achieving a striking similarity to a person-to-person visit. If on the telephone, you can continue the conversation without putting the outside party on "hold" while using the Centrum. Those doing manual work, such as in the laboratory or on the plant floor, use the Centrum without interrupting their work, thus saving valuable production time.

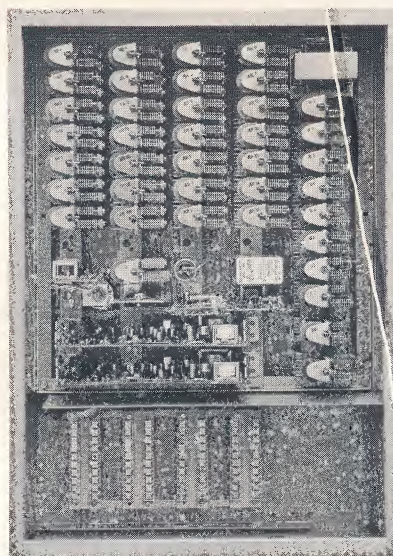
Only the Centrum has touch digit-button calling with hands-free communication for virtually any number of stations!

Centrums for 2 or thousands of stations

Unlike other intercommunication devices, the Centrum is controlled by fully-automatic exchanges. Instead of a bulky cable running from station-to-station, the Centrum interconnects the stations through single 4-conductor cables terminating in wall jacks. Thus, stations can be moved from location-to-location at will, and call numbers easily changed. Because of the exchange, installation is

simplified, and expansion possibilities virtually endless. Even the largest offices and plants have 100% area coverage!

In operation, the fully-transistorized Centrum exchange does all the work: it receives the coded call signals and automatically routes them to the appropriate party. It furnishes the voice-amplification and automatic voice switching for the system, allowing the stations themselves to be simple, rugged, and compact.

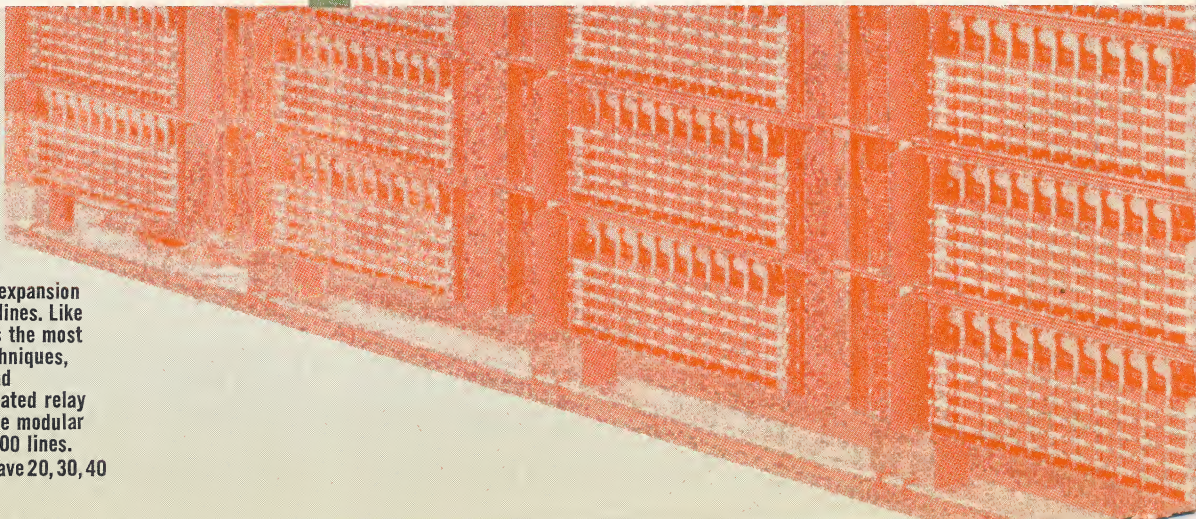


Left: Smallest of the Centrum exchanges is the compact, wall-mounted, 16-line CE 16/1 which provides all Centrum advantages — touch digit button calling, electronic voice switching, and special circuit options.

Background:

Centrum CE 800

exchange is rack-mounted and modular-constructed for easy expansion from 200 to several thousand lines. Like all Centrum exchanges, it uses the most recent crossbar switching techniques, printed circuits, solid state and transistor devices, and gold-plated relay contacts. A sister-exchange, the modular CE 200A, handles from 60 to 200 lines. Other Centrum exchanges have 20, 30, 40 and 60-line capacities.





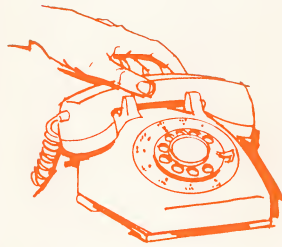
Calling by touch digit-buttons

Calling is pushbutton-simple with the Centrum. The caller simply touches the digit buttons designating the other party (2, 3, or 4 digits depending on the size of the system.)

The call goes through instantly — no dial tone, no waiting. Both parties are now in immediate, two-way, completely hands-free communication! (The caller may use a manual override button for control of the conversation, as may occasionally be desirable when one of the parties is in an overly noisy area.) When the call is finished, the caller simply touches the red 'off' button to disconnect.

The called party is summoned by both tone and light signals on the Centrum, thus affording him ample privacy through two distinct warnings. However, for even greater privacy, the Centrum's privacy slide button enables a station to be "shut down" to incoming calls, although lamp and tone signals still function. Thus alerted, the called party may, if he wishes, receive the call. Meanwhile, a special tone alerts the calling party that he has called a "private" station.

The hands-free efficiency of the Centrum shortens call lengths to a minimum. One must see to believe the speed with which conversations take place due to Centrum's simplified operation. Three or four "tracking down" calls are made in seconds, without the delays of dialing or the use of a handset. In a word, the Centrum allows everybody in every plant or office, no matter what its size, to be instantly, personally, in touch!



Mr. Thompson has hung up!

It happens in the best of companies. Outside calls are "locked out" while your telephone doubles as an intercom. Long solitary waits on "hold" annoy or anger your customers. Some like Mr. Thompson simply hang up. Result: customer ill-will and costly long-distance call-backs.

But fretting customers, forced tie-ups of expensive telephone equipment and increased toll calls aren't the only penalties exacted by inferior intercommunications. Your employees lose crucial man-hours waiting for information and walking to get it. Telephone bills soar and office efficiency plunges!

Modern management's solution: two separate systems, one for outside, the other for inside, calls. The first is the telephone. The other, ideally, is a completely hands-free intercommunication system offering instant calling from-anyone-to-anyone, in offices and plants of any size, and providing simple installation and dependable operation. These are the features of the Centrum, the most advanced intercommunication system in the world!

Here are the exclusive features of the Centrum. Not shown on these pages, however, are the economies of a Centrum system, which pays for itself many times over by boosting efficiency and slashing telephone rental bills. Why not discover these advantages for yourself!

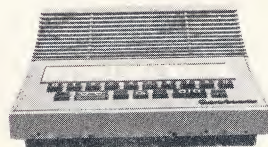
Only Centrum has these advantages:

- *Hands-free conversation for both parties*
- *Instant touch digit-button calling*
- *Capacity from 2 to 9000 stations*
- *Wall jack connections*
- *The industry's widest variety of special facilities*

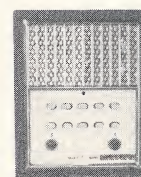
The Centrum adapts to any office routine

The Centrum offers a wide variety of special circuits for every job function in every office or plant. For instance, an executive's calls can be intercepted by his secretary with the Centrum. The system can also be used for paging — via an all-stations-call or a separate public address system. Answers-back are quickly made through the Centrum. Other typical facilities are tie-links between Centrum exchanges, tie-lines to private telephones, connecting horns, bells or gongs, and special substations for virtually every application. In short, Centrum provides the largest variety of special facilities in the industry!

All stations operate identically, are compatible with all Centrum exchanges.



Standard desk-top station: handsome modern lines, touch digit button calling, tone and light call signals, busy signal, privacy control. Centrum 6302.



Wall-mounted station: mounts flush, operates identically with other Centrum stations. Centrum 6304.



For the utmost in privacy: this station has a handset that automatically disconnects the loudspeaker when lifted from the cradle. Centrum 6303.



For outdoor, dusty, or noisy locations — heavy duty station has the same simplicity of operation with touch digit-button calling, as other Centrum stations. Centrum 6305.

Nationwide Centrum maintenance network

The dependability engineered into a Centrum system by one of the world's leading manufacturers of communications systems (AB Gylling and Co., Stockholm, Sweden) is assured by a nationwide network of technical representatives and communications consultants. More than 50 Centrum distributor organizations from coast-to-coast provide the minimal maintenance that is necessary with this

reliable system, and are only hours away if needed. Centrum's central exchange design ruggedizes the stations and simplifies the internal wiring in your office or plant, so that maintenance and downtime are never a problem. All Centrum stations, for desks, walls and plant areas, operate identically, further eliminating a potential source of trouble common to most other intercommunication systems.



CENTRUM ELECTRONICS, INC.

820 SECOND AVE / NEW YORK, N.Y. 10017



Don't daydream about the ideal intercommunication system



**Larger offices and plants use the Centrum Futura system, which is capable of handling up to thousands of stations, through the use of centrally-located, automatic exchanges. Information on both systems, and the name of your nearest Centrum representative, are available from Centrum Electronics, Inc., 545 Fifth Avenue, New York 17, N. Y.*



Discover the GB Duplex system!

To make the call, he has simply touched an electronically-activated name button. Audible and visual signals **instantly** summoned the called party. The conversation is hands-free on **both** sides. He (and the other party) can stand up, light a cigarette, take notes. He can converse from any part of his office, using a normal conversational tone.

He is using the remarkable GB Duplex system, that provides unmatched convenience of operation for offices and plants requiring as many as 15 stations.* He can visit every part of his company — even the noisy manufacturing areas — without lifting a foot. He can make, or answer, an outside call at any time, because his telephone is not engaged with interoffice calls.

He has discovered that the GB Duplex system is the most time-saving, work-saving device his company could employ. You'll discover it, too, if you'll allow us to demonstrate the GB Duplex system in your office, at your convenience.

GB Simplex system

Adaptability is the keynote of the GB Simplex system. With the addition of the special unit shown at the right, as many as three separate GB Simplex systems can be interconnected, allowing as many as 45 stations to participate. The system has the outstanding features of the GB Duplex system — electronic button calling, faithful voice reproduction, and high-quality workmanship — but provides a press-to-talk button in place of the Duplex system's automatic voice-switching feature. A wide variety of special equipment is available, as shown below.

As with the GB Duplex system, master stations are intermixable. They are available in GB-15, GB-7 and GB-2 sizes, capable of handling up to 15, 7 and 2 stations, respectively.



Typical system installation — GB Duplex or Simplex

